

SGCN and Stressors Associated with Habitats

Macrogroup: Boreal Upland Forest

Habitat Systems within Macrogroup:

MacrogroupName Boreal Upland Forest

Acadian Low Elevation Spruce-Fir-Hardwood Forest

Acadian Sub-boreal Spruce Flat

Acadian-Appalachian Montane Spr-Fir-Hwd Forest

Boreal Jack Pine-Black Spruce Forest

Boreal Upland Forest Macrogroup - Unknown Habitat System (i.e. Macrogroup)

Description: Wooded uplands characterized by black spruce or jack pine; sometimes by red spruce without temperate elements

SGCN Associated With This Habitat

Total SGCN: 1: 11 2: 29 3: 82

Class	<i>Amphibia</i> (Amphibians)	SGCN Category
Species	<i>Ambystoma laterale</i> (Blue-spotted Salamander)	2
Class	<i>Aves</i> (Birds)	SGCN Category
Species	<i>Picoides dorsalis</i> (American Three-toed Woodpecker)	3
Species	<i>Setophaga castanea</i> (Bay-breasted Warbler)	3
Species	<i>Catharus bicknelli</i> (Bicknell's Thrush)	1
Species	<i>Mniotilta varia</i> (Black-and-white Warbler)	2
Species	<i>Picoides arcticus</i> (Black-backed Woodpecker)	3
Species	<i>Coccyzus erythrophthalmus</i> (Black-billed Cuckoo)	3
Species	<i>Setophaga fusca</i> (Blackburnian Warbler)	3
Species	<i>Setophaga striata</i> (Blackpoll Warbler)	3
Species	<i>Setophaga virens</i> (Black-throated Green Warbler)	3
Species	<i>Chroicocephalus philadelphia</i> (Bonaparte's Gull)	3
Species	<i>Poecile hudsonicus</i> (Boreal Chickadee)	2
Species	<i>Buteo platypterus</i> (Broad-winged Hawk)	3
Species	<i>Cardellina canadensis</i> (Canada Warbler)	2
Species	<i>Setophaga tigrina</i> (Cape May Warbler)	3
Species	<i>Tyrannus tyrannus</i> (Eastern Kingbird)	2
Species	<i>Megascops asio</i> (Eastern Screech-owl)	3
Species	<i>Coccothraustes vespertinus</i> (Evening Grosbeak)	2
Species	<i>Passerella iliaca</i> (Fox Sparrow)	3
Species	<i>Perisoreus canadensis</i> (Gray Jay)	3
Species	<i>Ardea herodias</i> (Great Blue Heron)	2
Species	<i>Melospiza lincolnii</i> (Lincoln's Sparrow)	3
Species	<i>Asio otus</i> (Long-eared Owl)	3
Species	<i>Setophaga americana</i> (Northern Parula)	3
Species	<i>Contopus cooperi</i> (Olive-sided Flycatcher)	2
Species	<i>Pinicola enucleator</i> (Pine Grosbeak)	3
Species	<i>Haemorhous purpureus</i> (Purple Finch)	3
Species	<i>Loxia curvirostra</i> (Red Crossbill)	3
Species	<i>Regulus calendula</i> (Ruby-crowned Kinglet)	2
Species	<i>Euphagus carolinus</i> (Rusty Blackbird)	1
Species	<i>Egretta thula</i> (Snowy Egret)	3
Species	<i>Falcipennis canadensis</i> (Spruce Grouse)	3

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Species	<i>Catharus ustulatus</i> (Swainson's Thrush)	3
Species	<i>Oreothlypis peregrina</i> (Tennessee Warbler)	2
Species	<i>Zonotrichia albicollis</i> (White-throated Sparrow)	3
Species	<i>Loxia leucoptera</i> (White-winged Crossbill)	3
Species	<i>Empidonax flaviventris</i> (Yellow-bellied Flycatcher)	3
Class	<i>Insecta</i> (Insects)	SGCN Category
Species	<i>Hydroptila blicklei</i> (A Caddisfly)	3
Species	<i>Hydroptila parachelops</i> (A Caddisfly)	3
Species	<i>Hydroptila tomah</i> (A Caddisfly)	3
Species	<i>Ochrotrichia denningi</i> (A Caddisfly)	3
Species	<i>Ameletus browni</i> (A Mayfly)	3
Species	<i>Baetisca berneri</i> (A Mayfly)	3
Species	<i>Baetisca carolina</i> (A Mayfly)	3
Species	<i>Baetisca lacustris</i> (A Mayfly)	3
Species	<i>Baetisca rubescens</i> (A Mayfly)	3
Species	<i>Hexagenia rigida</i> (A Mayfly)	3
Species	<i>Metretopus borealis</i> (A Mayfly)	3
Species	<i>Nixe horrida</i> (A Mayfly)	3
Species	<i>Parameletus midas</i> (A Mayfly)	3
Species	<i>Rhithrogena undulata</i> (A Mayfly)	3
Species	<i>Siphonurus barbaroides</i> (A Mayfly)	3
Species	<i>Siphonurus barbarus</i> (A Mayfly)	2
Species	<i>Siphonurus demaryi</i> (A Mayfly)	2
Species	<i>Nepytia pellucidaria</i> (A Moth)	3
Species	<i>Alloperla voinae</i> (A Stonefly)	3
Species	<i>Neoperla mainensis</i> (A Stonefly)	3
Species	<i>Xylena thoracica</i> (Acadian Swordgrass Moth)	3
Species	<i>Bombus pensylvanicus</i> (American Bumble Bee)	2
Species	<i>Stylurus spiniceps</i> (Arrow Clubtail)	3
Species	<i>Cordulegaster obliqua</i> (Arrowhead Spiketail)	3
Species	<i>Bombus ashtoni</i> (Ashton's Cuckoo Bumble Bee)	2
Species	<i>Enallagma durum</i> (Big Bluet)	3
Species	<i>Tramea lacerata</i> (Black Saddlebags)	3
Species	<i>Callophrys lanoraieensis</i> (Bog Elfin)	3
Species	<i>Ophiogomphus colubrinus</i> (Boreal Snaketail)	1
Species	<i>Neurocordulia michaeli</i> (Broad-tailed Shadowdragon)	3
Species	<i>Bombus griseocollis</i> (Brown-belted Bumble Bee)	3
Species	<i>Leucorrhinia patricia</i> (Canada Whiteface)	2
Species	<i>Tramea carolina</i> (Carolina Saddlebags)	3
Species	<i>Ischnura hastata</i> (Citrine Forktail)	3
Species	<i>Gomphus vastus</i> (Cobra Clubtail)	3
Species	<i>Anax longipes</i> (Comet Darner)	3
Species	<i>Progomphus obscurus</i> (Common Sanddragon)	3
Species	<i>Nannothemis bella</i> (Elfin Skimmer)	3
Species	<i>Ophiogomphus anomalus</i> (Extra-striped Snaketail)	3
Species	<i>Bombus fernaldae</i> (Fernald's Cuckoo Bumble Bee)	3

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Species	<i>Hemaris gracilis</i> (Graceful Clearwing)	3
Species	<i>Somatochlora incurvata</i> (Incurvate Emerald)	3
Species	<i>Bombus insularis</i> (Indiscriminate Cuckoo Bumble Bee)	2
Species	<i>Bombus citrinus</i> (Lemon Cuckoo Bumble Bee)	3
Species	<i>Hesperia leonardus</i> (Leonard's Skipper)	3
Species	<i>Arigomphus furcifer</i> (Lilypad Clubtail)	3
Species	<i>Celithemis martha</i> (Martha's Pennant)	3
Species	<i>Enallagma laterale</i> (New England Bluet)	2
Species	<i>Plebejus idas</i> (Northern Blue)	2
Species	<i>Somatochlora minor</i> (Ocellated Emerald)	3
Species	<i>Libellula semifasciata</i> (Painted Skimmer)	3
Species	<i>Lithophane lepida lepida</i> (Pine Pinion)	2
Species	<i>Boloria chariclea grandis</i> (Purple Lesser Fritillary)	2
Species	<i>Ophiogomphus howei</i> (Pygmy Snaketail)	2
Species	<i>Somatochlora brevicincta</i> (Quebec Emerald)	2
Species	<i>Ischnura ramburii</i> (Rambur's Forktail)	3
Species	<i>Somatochlora albicincta</i> (Ringed Emerald)	3
Species	<i>Epeorus frisoni</i> (Roaring Brook Mayfly)	1
Species	<i>Bombus affinis</i> (Rusty-patched Bumble Bee)	1
Species	<i>Bombus sandersoni</i> (Sanderson's Bumble Bee)	3
Species	<i>Polygonia satyrus</i> (Satyr Comma)	3
Species	<i>Enallagma pictum</i> (Scarlet Bluet)	2
Species	<i>Erythrodiplax berenice</i> (Seaside Dragonlet)	3
Species	<i>Aeshna juncea</i> (Sedge Darner)	2
Species	<i>Lanthus vernalis</i> (Southern Pygmy Clubtail)	2
Species	<i>Rhionaeschna mutata</i> (Spatterdock Darner)	3
Species	<i>Pteronarcys comstocki</i> (Spiny Salmonfly)	3
Species	<i>Epiaeschna heros</i> (Swamp Darner)	3
Species	<i>Siphonisca aerodromia</i> (Tomah Mayfly)	1
Species	<i>Enallagma carunculatum</i> (Tule Bluet)	3
Species	<i>Bombus fervidus</i> (Yellow Bumble Bee)	3
Species	<i>Bombus terricola</i> (Yellowbanded Bumble Bee)	3
Species	<i>Aeshna sitchensis</i> (Zigzag Darner)	3

Class	<i>Mammalia</i> (Mammals)	SGCN Category
Species	<i>Eptesicus fuscus</i> (Big Brown Bat)	2
Species	<i>Lynx canadensis</i> (Canada Lynx)	2
Species	<i>Lasiurus borealis</i> (Eastern Red Bat)	3
Species	<i>Myotis leibii</i> (Eastern Small-footed Myotis)	1
Species	<i>Lasiurus cinereus</i> (Hoary Bat)	3
Species	<i>Myotis lucifugus</i> (Little Brown Bat)	1
Species	<i>Sorex dispar</i> (Long-tailed Shrew)	3
Species	<i>Synaptomys borealis sphagnicola</i> (Northern Bog Lemming)	1
Species	<i>Myotis septentrionalis</i> (Northern Long-eared Myotis)	1
Species	<i>Lasionycteris noctivagans</i> (Silver-haired Bat)	2
Species	<i>Perimyotis subflavus</i> (Tri-colored Bat)	2

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Class	<i>Reptilia</i> (Reptiles)	SGCN Category
Species	<i>Glyptemys insculpta</i> (Wood Turtle)	1

Endangered (E) and Threatened (T) Plant Species Associated With This Habitat

Class	Monocots <i>Monocotyledoneae</i>	State Status
Species	Giant Rattlesnake-plantain <i>Goodyera oblongifolia</i>	E

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Stressors Associated With This Macrogroup

IUCN Level 2 Threat Name: Air-Bourne Pollutants

Notes: Atmospheric nitrogen, among others, but long term impacts are not clear

IUCN Level 2 Threat Name: Annual and Perennial Non-timber crops

Notes: land conversion to agriculture

IUCN Level 2 Threat Name: Commercial and Industrial Areas

Notes: Impacts likely lower than forest types in southern and central ME

IUCN Level 2 Threat Name: Fire and Fire Suppression

Notes: Accidental fire, or fire suppression for a few types (black spruce barrens)

IUCN Level 2 Threat Name: Habitat Shifting or Alteration

Notes: Effects of CC are not clear on forests, but boreal and subalpine are likely among the most vulnerable of Maine's forest types

IUCN Level 2 Threat Name: Habitat Shifting or Alteration

Notes: Effects of climate change are uncertain, but boreal and subalpine are likely among the most vulnerable of Maine's forest types

IUCN Level 2 Threat Name: Housing and Urban Areas

Notes: Development is generally a lower stressor moving north and into unorganized towns; boreal upland forest had comparatively low predicted development in Anderson et al (2013)

IUCN Level 2 Threat Name: Livestock Farming and Ranching

Notes: historically, this had a much greater impact on the landscape in S. Maine.

IUCN Level 2 Threat Name: Logging and Wood Harvesting

Notes: Severity varies depending on intensity. May be a stress to species preferring closed canopy or late-successional systems; provides habitat for species using early to mid-successional forests; forest management also maintains working forest as v

IUCN Level 2 Threat Name: Logging and Wood Harvesting

Notes: Severity varies depending on intensity. May be a stress to species preferring closed canopy or late-successional systems; provides habitat for species using early to mid-successional forests; working forests can also help provide valuable open

IUCN Level 2 Threat Name: Mining and Quarrying

Notes: Mines for minerals, hard rock, metals; some constituent ecological systems are more prone to being developed as gravel pits.

IUCN Level 2 Threat Name: Problematic Native Species-Diseases

Notes: Spruce budworm may alter forest conditions, spraying Bt may be a stress for invertebrates

IUCN Level 2 Threat Name: Problematic Native Species-Diseases

Notes: Spruce budworm may alter forest conditions, spraying Bt may negatively impact some native Lepidoptera

IUCN Level 2 Threat Name: Recreational Activities

Notes: motorized vehicle use off-trail

IUCN Level 2 Threat Name: Renewable Energy

Notes: Wind energy development has direct impacts to habitat and when not properly sighted can have long-term impacts to birc and bat populations

IUCN Level 2 Threat Name: Renewable Energy

Notes: wind farms

IUCN Level 2 Threat Name: Roads and Railroads

Notes: Impacts of logging roads generally lower than public paved roads; depends on the species, type of road etc.

IUCN Level 2 Threat Name: Tourism and Recreational Areas

Notes: Ski area development, & non-motorized trail development

IUCN Level 2 Threat Name: Utility and Service Lines

Notes: Some utility lines may provide early successional or shrub/scrub habitat

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Habitat Conservation Actions:

Relevant conservation actions for this habitat are assigned within broader habitat groupings in Maine's 2015 Wildlife Action Plan: Element 4, Table 4-15. Click on the Habitat Grouping of interest to launch a habitat based report summarizing relevant conservation actions and associated SGCN.

Species Conservation Actions:

Conservation actions that may benefit species associated with this habitat can be found in Maine's 2015 Wildlife Action Plan: Element 1, Table 1-3. Click on the species of interest to launch a species based report summarizing relevant conservation actions and associated habitats.

The Wildlife Action Plan was developed through a lengthy participatory process with state agencies, targeted conservation partners, and the general public. The Plan is non-regulatory. The species, stressors, and voluntary conservation actions identified in the Plan complement, but do not replace, existing work programs and priorities by state agencies and partners.